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PATENT APPLICATION

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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Gregory J May

Confirmation No.: 6035

Application No.: 10/665831

Examiner: Seokyun Moon

Filing Date: Sep 19, 2003

Group Art Unit: 2629

Title: Optically Addressable Display And Method Driven By Polarized Emissions

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on October 31, 2006.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month
\$120

☐ 2nd Month
\$450

☐ 3rd Month
\$1020

☐ 4th Month
\$1590

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 500. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

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Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Patent Application of

Gregory J. May

Application No. 10/665,831

Filed: September 19, 2003

Group Art Unit: 2629

Examiner: SEOKYUN MOON

For: OPTICALLY ADDRESSABLE DISPLAY AND METHOD DRIVEN BY
POLARIZED EMISSIONS

APPEAL BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under Rule 41.37 appealing the final decision of the Examiner dated August 15, 2006. Each of the topics required by Rule 41.37 is presented herewith and is labeled appropriately.

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. Related Appeals and Interferences

There are no appeals or interferences related to the present application of which the Appellant is aware.

III. Status of Claims

Claims 1-37 stand finally rejected.

The pending claims are presented in the Appendix as required by 37 C.F.R. § 41.37.

IV. Status of Amendments

No amendments have been filed subsequent to the Final Office Action.

V. Summary of Claimed Subject Matter

The present invention is directed to optically addressable display and methods for delivering color information to optically addressable displays (page 4:7-8). Applicant's invention in particular concerns an optically addressable display that has a projection device and a screen that cooperate using plural polarizations to define a corresponding number of color channels to deliver color information from the projection device to the screen. In particular for claim 1 and Figure 1, the projection device has a mechanism (12) to create emissions (14) with the plural polarizations (18) and a data encoder (20) to apply data for each of the color channels. As seen in Fig. 7, the screen (22) has a plurality of pixels (22) for producing a color display (red 64, green 66, and blue 68 LEDs) and a plurality of receptors (70). Each pixel (22) on the display has at least one receptor (70). The receptors (70) activate the pixels (22) dependent upon which, if any, of the plural polarizations (18) is received at the

receptor (70). For instance, the receptor (70) may include a polarization filter (72) on a receiving end (74) of the receptor (70).

In particular claim 25 (see Figs. 1, 7, and 8) addresses a method of encoding the color data to activate an optically addressable display (10) including a plurality of pixels (22). The projection device includes steps for producing emissions of different polarizations (such as using emission source 12 with sequential polarization filter (16) for each pixel by applying data (using data encoder 20) to each of the emissions (14) of different polarizations (18). This applying data is done by selectively passing the emissions (14) of different polarizations (18) to the pixels (22) in data decoder (20). Then, at the optically addressable display at each pixel (22), a different display (red 64, green 66, and blue 68) is produced for each of said emissions of different polarizations (18) when received at a corresponding receptor (70).

Similarly claim 35 (See Fig. 1 and Fig. 9) addresses a method of encoding the color data to activate an optically addressable display (10). At a projection device, multiple color channels are defined with emissions (14) of multiple polarization states (18). On a pixel-by-pixel and channel-by-channel basis, data is applied to the emissions (in data encoder 20). This action permits emissions (14) to reach a pixel (22) in the optically addressable display indicated to be on by the data. At the optically addressed display (see Fig. 7), filtering is performed (in polarization filter 72) to make each set of commonly colored display elements (red 64, green 66, and blue 68 LEDs) responsive to a different polarization state than other sets of commonly colored display elements.

In particular for claim 36, an optically addressable display (10) includes a projection device and an array of pixels (22) on a screen. The projection device incorporates means for directing emissions of plural polarization states (see Figs. 2A-D and 8 and multi-segment filter 24; Fig. 9 and LCD 84; and Figs. 10A-C and LCD shutters 100A-C) toward an array of pixels (22). Also included is a means for selectively passing emissions (Figs. 5A, 5B, 5C and in particular DMD 46 and mirrors 50; Fig. 8 with DMD 46 and condensing lens 82; Fig. 9 with LCD 84; and Fig. 10A with LCD shutters 94 and projecting lens 98) of each of the plural polarization states according to applied data. The screen incorporates at each pixel (22), means for actively producing plural color displays (see Fig. 7 with receptors 70 and red 64, green 66, and blue 68 LEDs), one for each of the plural polarization states.

In particular for claim 37, an optically addressable display (10) includes means for receiving emissions (such as polarization filters 72 in Fig. 7) of a plurality of polarizations

(18), each of the plurality of polarizations (18) corresponding to a separate color data channel wherein data is encoded onto each of the separate color data channels (such as with DMD 48 in Figs. 5A-5C and 8, and LCD 84 in Fig. 9 or LCD shutters 100A-C in Figs. 10A-C). At each pixel (22), means for actively producing plural color displays (see Fig. 7 with receptors 70 and red 64, green 66, and blue 68 LEDs), one for each of the plurality of polarizations (18) of received emissions (14).

VI. Grounds of Rejection to be Reviewed on Appeal

In the final Office Action, claims 1, 3-8, 10-16, 19-23, 25-32, and 34-37 were rejected as unpatentable under 35 U.S.C. § 103(a) by U.S. Patent No. 6,819,064 to Nakanishi in view of U.S. Patent No. 5,517,340 to Doany et al. ("Doany").

Claims 2, 24, and 33 were rejected as unpatentable under 35 U.S.C. § 103(a) over Nakanishi and Doany and further in view of Morgan et al. (U.S. Patent No. 6,453,067, "Morgan") and Marshall et al. (U.S. Patent No. 5,706,061, "Marshall").

Claim 9 was rejected as unpatentable under 35 U.S.C. § 103(a) as being unpatentable over Nakanishi and Doany and further in view of Son et al. (U.S. Patent No. 6,603,504, "Son").

Claim 17 was rejected as unpatentable under 35 U.S.C. § 103(a) as being unpatentable over Nakanishi and Doany and further in view of Vogeley et al. (U.S. Patent No. 5,831,601, "Vogeley").

Claim 18 was rejected as unpatentable under 35 U.S.C. § 103(a) as being unpatentable over Nakanishi and Doany and further in view of Tiao et al. (U.S. Patent No. 6,227,669, "Tiao").

Appellant appeals these rejection as to claims 1-37. Therefore, Appellant respectfully request review of this ground of rejection as to claims 1-37 in the present appeal.

To simplify issues for appeal, Applicant will argue the rejection of the independent claims 1, 25, 35, 36, and 37 which were each rejected under Nakanishi in view of Doany.

VII. Argument

Applicant respectfully submits that the combination of Nakanishi and Doany fails to disclose, teach, or suggest Applicant's claimed invention. Respectfully, Applicant asserts that the Examiner has failed to make a prima facie case in proving that all of the claimed elements

are taught in the combined references. Nor has the Examiner considered Applicant's claimed invention "as a whole" nor the references themselves "as a whole" for what they teach. Applicant is claiming an optically addressable display that includes a projection device that cooperates with a screen having active pixels. The projection device sends color information for each pixel to the screen using modulated polarization data. The screen, at each pixel, receives this modulated polarization data and decodes it to produce respective colors at each pixel location. Neither Nakanishi nor Doany, alone or in combination, disclose such an optically addressable display as claimed by the Applicant.

Nakanishi discloses a projection device that allows for images to be sent to a "passive" screen using multiple color wheels or color segments to vary the color intensity to allow the spatial light modulator to operate at lower speeds than with a single color wheel. Thus Nakanishi does not disclose a screen that cooperates with the projector, nor a projector that modulates the color signals as various polarizations, nor a screen that actually creates color emissions based on the received polarizations.

Doany discloses a two light valve (spatial light modulator) system that uses a six segment color wheel having the three primary colors split into both S and P polarizations that are directed individually to the respective two light valves. Doany also discloses a "passive" screen. Thus, Doany does not disclose modulating the color information as different polarization states but rather discloses using polarization to direct a particular image of multiple colors to one of two modulators. Doany does not disclose a screen that cooperates with the projector, nor a projector that modulates the color signals as various polarizations, nor a screen that actually creates color emissions based on the received polarizations.

As stated in In re Lintner¹ a prima facie case of obviousness requires the PTO to "ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification." "To reach a proper conclusion under §103, the decision maker must step backward in time and into the shoes worn by that "person" when the invention was unknown and just before it was made. In light of all the evidence, the decision maker must then determine whether the . . . claimed invention as a whole would

¹ 173 USPQ 560, 562 (CCPA 1972)

have been obvious at that time to that person.”² Further, “Obviousness under 35 USC 103 ((1982) & Supp. III 1985) is a legal issue, the determination of which involves factual inquiries into (1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) any objective evidence of non obviousness, such as long felt need, commercial success, failures of others.”³ The Applicant believes the Examiner has failed to perform such a factual inquiry and has inappropriately used Applicant's claimed invention as a template to make the various 103 combinations.

The scope of both Nakanishi and Doany deal with limited performance of the switching speeds of spatial light modulators. The content of Nakanishi deals with using varying intensity filters to allow for less switching by the spatial light modulators. The content of Doany is to split color segments into different polarizations to allow for a two spatial light modulator system to remove dead state time and thus increase performance. The difference between the claimed invention and the prior art is substantial. The invention, rather than converting emissions from a light source to various time segmented color bands of various intensities (Nakanishi) or polarizations (Doany), converts the emissions to time segmented various polarities that are used to represent the colors. The emissions are then modulated by a spatial light modulator and received at a screen. Both Nakanishi and Doany modulate the segmented color bands to create an image that is projected onto a passive screen. The claimed invention instead receives the modulated emissions at receptors to decode the modulated emissions and create a color image on the active screen. Thus, in the applicant's claimed invention, the screen and the projector work together to create the final image whereas the prior art creates an image with the projector and simply reflects it off the passive screen. The claimed invention is inventive over the cited art in that the power of the projector can be minimal as it is only conveying information of the image, and the image is created at the screen based on the conveyed information. The claimed invention is also inventive over other optically addressable display systems in that it provides a cost efficient solution with less alignment issues due to the various polarizations and polarization filters

² Panduit Corp. v. Dennison Manufacturing Co., 1 USPQ 2d 1593, 1595-96 (Fed. Cir.), cert. Denied, 481 U.S. 1052 (1987).

³ Allen Archery Inc. v. Browning Manufacturing Co., 2 USPQ.2d 1490, 1493 (Fed. Cir. 1987).

providing color decoding by virtue of their orientation.

In addition, the Applicant believes that the Examiner has failed to consider Applicant's invention and indeed the references 'as a whole.' As stated by the Federal Circuit, "the claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination."⁴

What's more, the Examiner has not considered all that the references teach and instead has chosen to select individual components without looking at all that is taught, including those limitations that teach away from Applicant's invention. "[P]rior art references before the tribunal must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention. . . . Moreover, appellants cannot pick and choose among individual parts of assorted prior art references "as a mosaic to recreate a facsimile of the claimed invention."⁵ Again, the Examiner has failed to look at Applicant's claimed invention as a whole but merely looked at what was different between the Applicant's claimed invention and the various cited references. "It should not be necessary . . . to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 USC 103."⁶ "Moreover, the conception of a new and useful improvement must be considered along with the actual means of achieving it in determining the presence or absence of invention. . . . The discovery of a problem calling for an improvement is often a very essential element in an invention correcting such a problem; and though the problem, once realized, may be solved by use of old and known elements, this does not necessarily negative invention."⁷ "The court must be ever alert not to read obviousness into an invention on the basis of the applicant's own statements; that is, we must view the prior art without reading into that art appellant's teachings. . . . The issue, then, is whether the teachings of the prior art would, in and of themselves and without the benefits of

⁴Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 488 (Fed. Cir. 1984)

⁵ Akzo N.V. v. United States International Trade Commission, 1 USPQ.2d 1241, 1246 (Fed. Cir 1986), cert. Denied, 482 U.S. 909 (1987).

⁶ In re Nomiya, 184 USPQ 607, 612 (CCPA 1975).

⁷ In re Bisley, 94 USPQ 80, 86-87 (CCPA 1952).

appellant's disclosure, make the invention as a whole, obvious."⁸ Applicant believes that without the Applicant's disclosure, a person of ordinary skill in the art at the time the invention was made would not have been able to deduce Applicant's claimed invention without the knowledge gleaned from Applicant's disclosure. Applicant respectfully submits that there is no teaching, suggestion, or motivation in Nakanishi and Doany that would lead one of ordinary skill in the art to create Applicant's claimed invention.

Applicant will now discuss each independent claim in particular.

Claim 1:

Independent claim 1 recites:

An optically addressable display comprising:

a projection device including,

a mechanism to create emissions having plural polarizations defining a corresponding number of color channels; and

a data encoder to apply data for each of the color channels to corresponding ones of the plural polarizations; and

a screen including,

a plurality of pixels for producing a color display; and

a plurality of receptors including at least one receptor for each of said plurality of pixels, said plurality of receptors activating said pixels depending upon which, if any, of the plural polarizations is received.

The Examiner asserts "Nakanishi inherently teaches / discloses the plurality of pixels to include a plurality of receptors activating the pixels since it is required for Nakanishi to activate the pixels to display images on the screen of the display according to the lights of different color elements transmitted by 'DMD.'" However, Applicant respectfully submits that Nakanishi only discloses the screen being a passive reflective screen to reflect the colors transmitted by the projector of Nakanishi. Col. 1, lines 33-35 cited by the Examiner describes the spatial light modulator 2 which is equivalent to Applicant's "data encoder" and thus is not part of the screen but the projection device as Nakanishi describes. Col. 1, lines 47-49 cited by the Examiner again describes the spatial light modulator 2 which is again not part of the screen but rather the projection device. The Examiner admits that Nakanishi does not teach the emissions having plural polarizations but uses Doany as teaching "generating a polarized emission for each of a plural colors." However, as noted Doany teaches creating six color

⁸ In re Sponnoble, 160 USPQ 237, 243 (CCPA 1969).

segments, a RED P, a RED S, a BLUE P, a BLUE S, a GREEN P, and a GREEN S which are used to separate data going to two modulators. Applicant is claiming plural polarizations defining a corresponding number of color channels. Thus, for a similar RGB system, Applicant is creating a first polarization to define a first color channel that will be data modulated to correspond to a first color, a second polarization to define a second color channel that will be data modulated to correspond to a second color, and a third polarization to define a third color channel that will be data modulated to correspond to a third color. These first, second, and third polarizations represent the colors but are not actually the colors but carry the color information. Nor does Doany disclose "a plurality of receptors including at least one receptor for each of said plurality of pixels, said plurality of receptors activating said pixels depending upon which, if any, of the plural polarizations is received." Doany two spatial light modulators (22) are also equivalent to Applicant's "data encoder" and thus is not part of the screen or its plurality of receptors which activate the pixels based on the plural polarizations received. Accordingly, Nakanishi and Doany in combination do not disclose, teach, or suggest nor would one of ordinary skill in the art be motivated by any teachings in the references to modify them to create Applicant's claimed invention.

Claim 25:

Independent claim 25 recites:

25. A method of encoding color data to activate an optically addressable display including a plurality of pixels, the method comprising the steps of:

at a projection device:

producing emissions of different polarizations;
for each pixel, applying data to each of said emissions of different polarizations by selectively passing said emissions of different polarizations to said pixels;

at the optically addressable display:

at each pixel, producing a different display for each of said emissions of different polarizations when received.

As noted for claim 1, neither Nakanishi nor Doany discloses an optically addressable display where at each pixel a different display is produced for each of the emission of different polarization when received. Doany at each modulator receives a single polarization and applies data to the single polarizations but this is done at the projection device and not at the optically addressable display. As noted, Nakanishi does not produce emissions of

different polarizations nor disclose anything other than a passive reflective screen. Accordingly, Nakanishi and Doany in combination do not disclose, teach, or suggest Applicant's claimed invention.

Claim 35:

Independent claim 35 recites:

35. A method of encoding color data to activate an optically addressable display, the method comprising the steps of:
at a projection device:
defining multiple color channels with emissions of multiple polarization states; and
applying data, on a pixel-by-pixel and channel-by-channel basis to said emissions by permitting emissions to reach a pixel in the optically addressable display indicated to be on by the data; and
at the optically addressed display:
filtering to make each set of commonly colored display elements responsive to a different polarization state than other sets of commonly colored display elements.

As noted for claim 1, neither Nakanishi nor Doany disclose, teach, or suggest anything other than a passive reflective screen. Therefore neither discloses "at the optically addressed display" "filtering to make each set of commonly colored display elements responsive to a different polarization state than other sets of commonly colored display elements." Doany discloses receiving different polarizations of color at separate modulators which "apply data on a pixel-by-pixel and channel-by-channel basis." However, "filtering" of the different polarization states occurs at the polarization beam splitter 24 in the projector (see Fig. 6) and does not separate colors as each color is received by each modulator 22. Nakanishi does not disclose, teach, or suggest any of the method steps of claim 35. Accordingly, Nakanishi and Doany in combination do not disclose, teach, or suggest Applicant's claimed invention.

Claim 36:

Independent claim 36 recites:

36. An optically addressable display comprising:
a projection device, including,
 means for directing emissions of plural polarization states toward an array of pixels; and
 means for selectively passing emissions of each of the plural polarization states according to applied data; and
a screen, including,
 at each pixel, means for actively producing plural color displays, one for each of the plural polarization states.

As noted for claim 1, neither Nakanishi nor Doany disclose, teach, or suggest other than a passive reflective screen. Thus, neither discloses "a screen including, at each pixel, means for producing plural color displays, one for each of the plural polarization states." Doany discloses a separate modulator 22 for each of its P and S polarization states but these modulators 22 are in the projection device. Nakanishi does not disclose any of the means limitations in the projector or display. Accordingly, Nakanishi and Doany in combination do not disclose, teach, or suggest Applicant's claimed invention.

Claim 37:

Independent claim 37 recites:

37. An optically addressable display comprising:
 means for receiving emissions of a plurality of polarizations, each of the plurality of polarizations corresponding to a separate color data channel wherein data is encoded onto each of the separate color data channels; and
 at each pixel, means for actively producing plural color displays, one for each of the plurality of polarizations of received emissions.

As noted for claim 1, neither Nakanishi nor Doany disclose, teach, or suggest other than a passive reflective screen. Thus, neither discloses "means for receiving emission of a plurality of polarizations, each of the plurality of polarizations corresponding to a separate color data channel." Doany discloses a separate modulator 22 for each of its P and S polarization states but these modulators 22 receive each color channel for respective P and S polarizations and not for "separate color data channels". Nakanishi does not disclose any of the means limitations as it doesn't disclose using different polarizations. Accordingly,

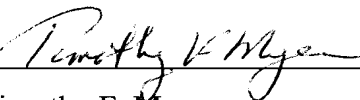
Nakanishi and Doany in combination do not disclose, teach, or suggest Applicant's claimed invention.

The dependent claims 2-24 and 26-34 are believed patentable based at least on the patentability of their respective parent independent claims.

In view of the foregoing, it is submitted that the final rejection of the pending claims is improper and should not be sustained. Therefore, a reversal of the Final Rejection of August 15, 2006 is respectfully requested.

Respectfully submitted,
for Gregory J. May

DATE: December 20, 2006



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VIII. CLAIMS APPENDIX

1. (Previously Presented) An optically addressable display comprising:
a projection device including,
 a mechanism to create emissions having plural polarizations defining a
corresponding number of color channels; and
 a data encoder to apply data for each of the color channels to corresponding
ones of the plural polarizations; and
a screen including,
 a plurality of pixels for producing a color display; and
 a plurality of receptors including at least one receptor for each of said plurality
of pixels, said plurality of receptors activating said pixels depending upon which, if
any, of the plural polarizations is received.
2. (Original) The display according to claim 1, wherein said data encoder receives
said emissions of plural polarizations simultaneously and applies data simultaneously for each
of the multiple color channels.
3. (Previously Presented) The display according to claim 1, wherein the
mechanism to create emissions further comprises:
 a source producing visible or non-visible spectrum emission; and
 a polarization filter to sequentially polarize said visible or non-visible emissions to
produce said emissions of plural polarizations as sequentially polarized emissions; wherein
said data encoder sequentially applies data for the multiple color channels on a channel-by-
channel basis to the sequentially polarized emissions.
4. (Original) The display according to claim 3, wherein said polarization filter is a
multi-segment filter, each segment corresponding to a different one of multiple polarization
phases.
5. (Original) The display according to claim 4, wherein said multi-segment filter
comprises a rotating filter disposed in the path of said emissions to sequentially polarize said
emissions through the multiple polarization phases.

6. (Original) The display according to claim 3, wherein said polarization filter is a rotating linear filter that sequentially polarizes said emissions through multiple polarization phase peaks.

7. (Previously Presented) The display according to claim 6, wherein each pixel comprises a multi-physical element pixel for displaying multiple colors, and wherein different ones of said multiple colors are encoded by a bands near different ones of said multiple polarization phase peaks.

8. (Original) The display according to claim 3, wherein said polarization filter comprises a circular polarization filter.

9. (Original) The display according to claim 3, wherein said data encoder comprises an array of light masks each corresponding to one or more of said receptors, each of said light masks selectively blocking or permitting said emissions to pass to a corresponding one or more of said receptors based upon the data.

10. (Original) The display according to claim 3, wherein said data encoder comprises an array of digital light processing mirrors, each corresponding to one or more of said receptors, each of said digital light processing mirrors selectively reflecting said emissions away from or toward a corresponding one or more of said receptors based upon the data.

11. (Original) The display according to claim 10, wherein said sequentially polarized emissions comprises a single beam of emissions having a diameter that completely encompasses said array of digital light processing mirrors.

12. (Original) The display according to claim 11, comprising a separate mirror for each of said pixels and a corresponding one of said receptors.

13. (Original) The display according to claim 12, wherein each pixel is one of multiple colors; said polarization filter sequentially polarizes said emissions into one of multiple polarization states, a separate polarization state corresponding to each the multiple colors; and each receptor is responsive to only one of said multiple separate polarization states.

14. (Original) The display according to claim 13, wherein, each of said digital light processing mirrors is positioned to reflect light away from its corresponding receptor in response to a data indicating that its corresponding pixel should be off.

15. (Original) The display according to claim 14, wherein said polarization filter is a rotating linear filter that sequentially polarizes said emissions through multiple polarization phase peaks.

16. (Original) The display according to claim 15, wherein each of said receptors is positioned adjacent receptors responsive to bands near different ones of said multiple polarization phase peaks.

17. (Original) The display according to claim 15, further comprising a light absorber to absorb light reflected away from said receptors.

18. (Original) The display according to claim 13, further comprising an integrating rod to provide uniformity to the emissions produced by said source.

19. (Original) The display according to claim 3, further comprising a projecting lens after said data encoder to project said sequentially polarized emissions toward said plurality of receptors.

20. (Original) The display according to claim 1, each of said plurality of pixels including multiple corresponding receptors, each of said multiple corresponding receptors responding to a different polarization state of said emissions of plural polarizations, each of said plurality of pixels producing one of multiple colors as a display.

21. (Original) The display according to claim 1, wherein each of said plurality of pixels comprises a plurality of light emitting diodes.

22. (Original) The display according to claim 21, wherein each of said pixels includes light emitting diodes of at least three different colors.

23. (Original) The display according to claim 1, wherein said data encoder comprises an LCD shutter device.

24. (Original) The display according to claim 23, wherein said LCD shutter device receives said emissions of plural polarizations simultaneously and applies data simultaneously for all of the color channels on a pixel-by-pixel basis.

25. (Previously Presented) A method of encoding color data to activate an optically addressable display including a plurality of pixels, the method comprising the steps of:
at a projection device:
producing emissions of different polarizations;
for each pixel, applying data to each of said emissions of different polarizations by selectively passing said emissions of different polarizations to said pixels;
at the optically addressable display:
at each pixel, producing a different display for each of said emissions of different polarizations when received.

26. (Original) The method of encoding according to claim 25, wherein said step of producing comprises:

generating an emission in a visible or non-visible spectrum; and
alternating polarization of said emission.

27. (Original) The method of encoding according to claim 26, wherein said generating step comprises generating a laser emission.

28. (Original) The method of encoding according to claim 26, wherein said alternating step comprises filtering said emission.

29. (Original) The method of encoding according to claim 26, wherein said alternating step comprises filtering said emission through one of a multi-segment and linear filter.

30. (Original) The method of encoding according to claim 29, wherein said alternating step comprises alternating polarization between one of multiple different phases.

31. (Original) The method of encoding according to claim 25, wherein said step of applying data comprises selectively shuttering said emissions of different polarizations.

32. (Original) The method of encoding according to claim 25, wherein said step of applying data comprises selectively reflecting said emissions of different polarizations toward or away from a corresponding pixel.

33. (Original) The method of encoding according to claim 25, wherein said step of applying data applies data to the emissions of different polarizations simultaneously.

34. (Original) The method of encoding according to claim 25, wherein said step of applying data applies data to the emissions of different polarizations sequentially.

35. (Previously Presented) A method of encoding color data to activate an optically addressable display, the method comprising the steps of:

at a projection device:

defining multiple color channels with emissions of multiple polarization states; and

applying data, on a pixel-by-pixel and channel-by-channel basis to said emissions by permitting emissions to reach a pixel in the optically addressable display indicated to be on by the data; and

at the optically addressed display:

filtering to make each set of commonly colored display elements responsive to a different polarization state than other sets of commonly colored display elements.

36. (Previously Presented) An optically addressable display comprising:

a projection device, including,

means for directing emissions of plural polarization states toward an array of pixels; and

means for selectively passing emissions of each of the plural polarization states according to applied data; and

a screen, including,

at each pixel, means for actively producing plural color displays, one for each of the plural polarization states.

37. (Previously Presented) An optically addressable display comprising:

means for receiving emissions of a plurality of polarizations, each of the plurality of polarizations corresponding to a separate color data channel wherein data is encoded onto each of the separate color data channels; and

at each pixel, means for actively producing plural color displays, one for each of the plurality of polarizations of received emissions.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None

XI. Certificate of Service

None